

ACCESS

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CHAPTER 1

WHAT IS ACCESS?

Access is a database that helps you organize large amounts of information into individual records. It also allows you to look up specific information to see which records do or do not apply. You are also able to relate different records together, create charts, forms, and reports. You are able to edit, add or delete records as needed in order to keep information accurate and current.



CHAPTER 1



KEY TERMS

- **Database** - a collection of records. The database includes tables, queries, charts, macros, reports, and forms. Databases are extremely organized to be able to provide answers quick to businesses.
- **Table** - related records and data, most often people, which would include their names and specific contact information. Tables are kept in the columns and rows format.
- **Field** - the single cell that contains information
- **Column** - vertical row in a table which tells the name of the data in that column, as well as the data type (image, text)
- **Record** - the horizontal row in a table. It is the information that fills out the fields and what the table is about.

Access

A database keeps track of information that is related to each other. This makes it easy to find specific information, or to see which ones are related to each other. You can put almost any type of information into a database, which is why businesses use them. Having databases online is much more faster and practical than having all the information on multiple papers that have to be kept sorted and in folders to be able to find the right information.



Databases keep the information in separate tables depending on what the table is about. Then, you are able to relate tables to be able to find information that links both of them together.

Access can be used by you to help keep records of your personal information, or by businesses to keep track of customers, inventory, and products. In one table, you can have up to 255 fields. However, if you are using it a SQL server, it allows for many more fields. This is mainly used by very large companies, as most will only use an average of 20-30 fields per table.



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Creating a Database



A quick introduction to Microsoft Access

CHAPTER 2

TABLES

Tables hold records that are related to each other. For example, you could have an employee table, an inventory table, and a customer table. This way the different types of information are kept organized and not all jumbled together. Tables are organized with columns and rows. The columns contain the headings, and the rows contain the information you are supplied with.

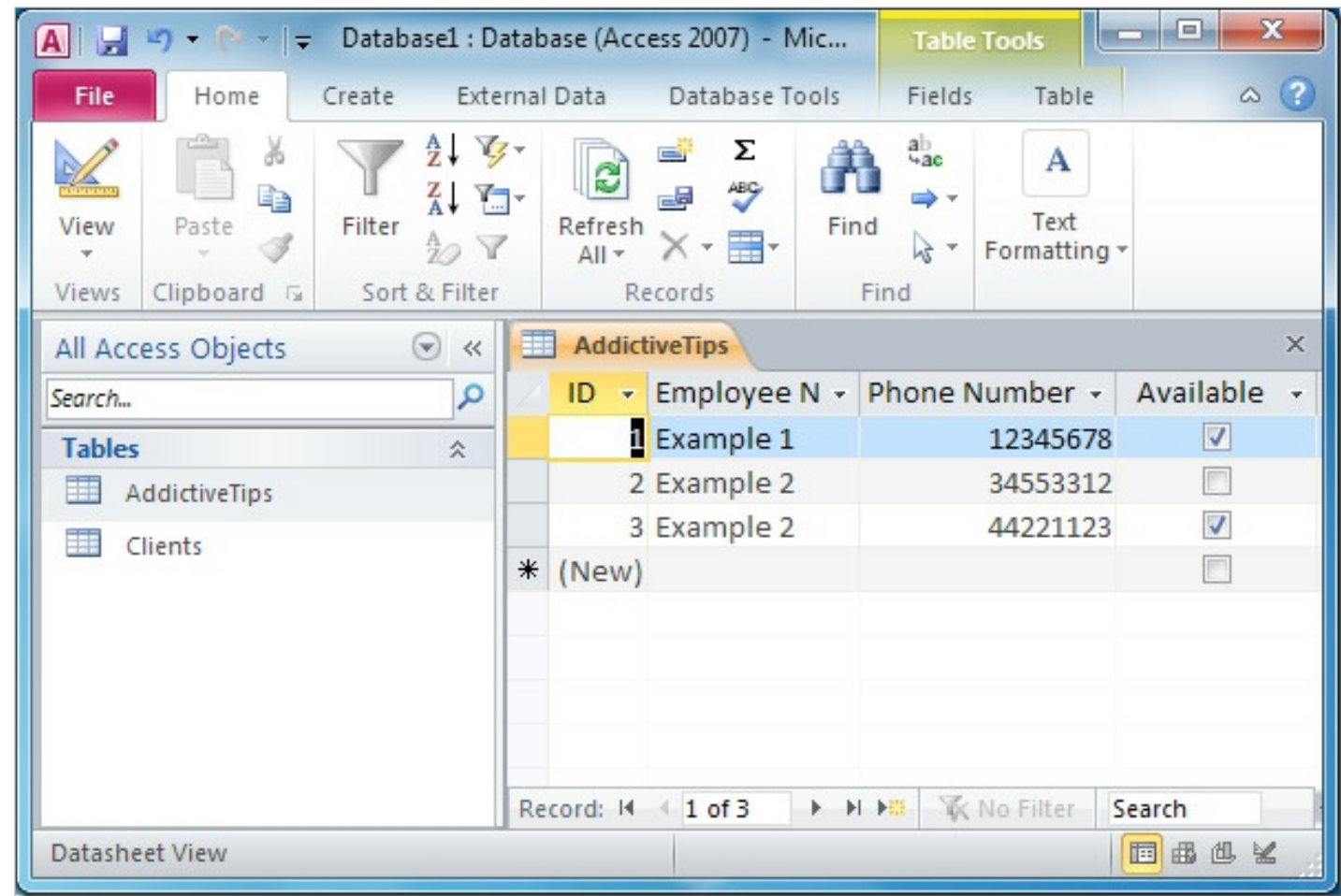


CHAPTER 2

Tables

KEY TERMS

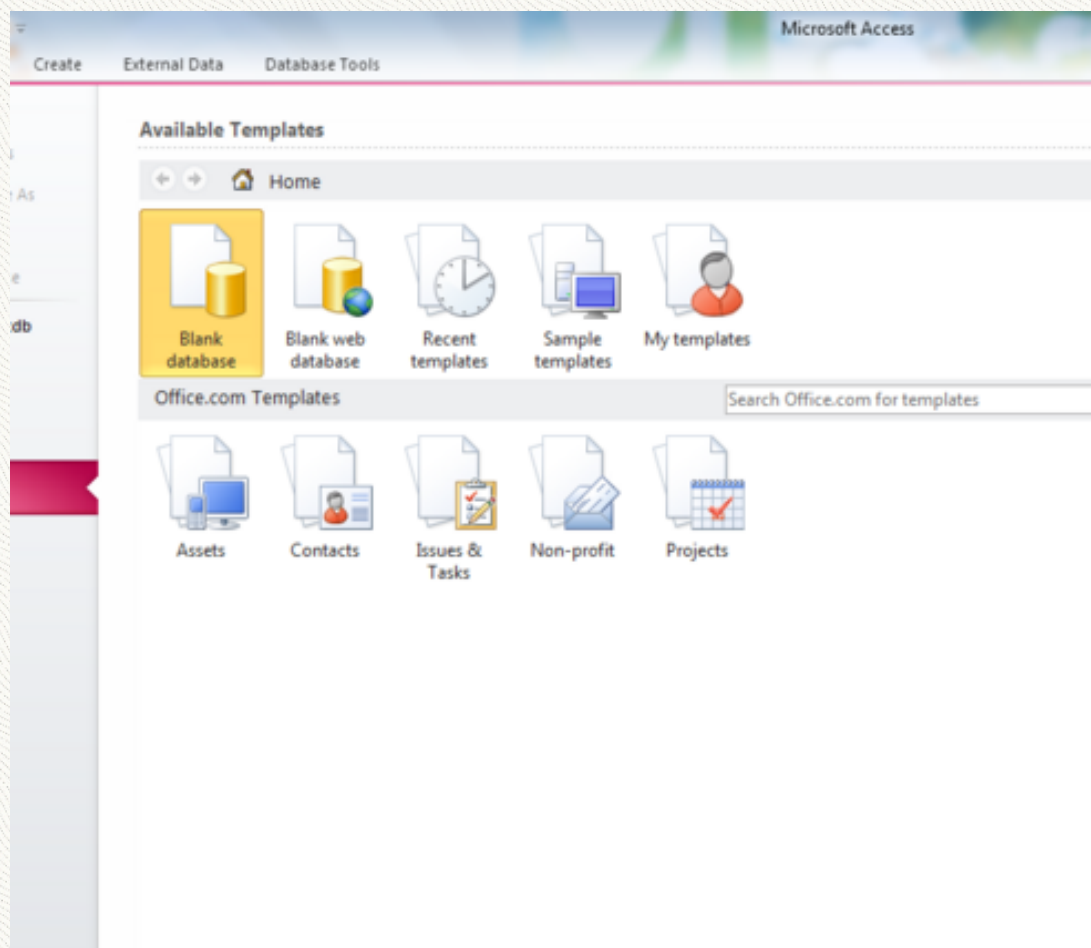
- **Record** - The row of information in a table that belongs to one individual or company. There may be any number of records in a table. ex. contact information, employee number, commission info. etc.
- **ID** - The individual record's unique identifier
- **Objects** - What you can create in Access; table, form, query, macro, report, and module.
- **View** - Layout, Design, and Datasheet views are available to input information. There is also Print Preview and Backstage view.



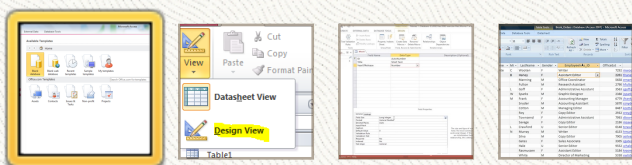
To create a new table, you first need to know what types of information you will be inputting so that you can create accurate headings. Next you will need to name them. The names of the headings need to be short and to the point so that you can see it when entering the information for the records. If you need to clarify something for the heading, you can add a description that pops up when you move your mouse over the heading.

After creating your new document, you want to make your first table by going to Design View. By following the steps below, you will enter the headings of your table and the

Gallery 2.1 Creating Fields and Entering Information into a New Table



Begin by starting a new, blank document.



data type of each heading. If you are not sure what data type should be used, Text is a good option. Once you have entered all the headings, the data types and any descriptions, you can now go back to Datasheet view and enter the information for your records.

Interactive 2.1

Field Name	Data Type
ST_ID	Number
Name	Text
Course	Text
Marks	Number
Grade	Text
Phone	Number
Present	Yes/No

Field Properties	
Field Size	Long Integer
Format	
Decimal Places	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (No Duplicates)
Smart Tags	
Text Align	General

Examples of Tables

Common Titles for Headings:

- Title
- First Name
- Last Name
- Middle Initial
- Home Phone
- Cellphone
- Work Phone
- Extension
- Fax
- Email
- Address
- City
- Province
- Postal Code

ID	Name	Course	Phone No	Marks	Click to Add
1	Alice Cooper	Software Engineering -1	9999998	70	
2	Alice Cooper	RDBMS	9999998	60	
3	Alice Cooper	Requirement Engineering	9999998	90	
4	Jack Mcfadedn	Software Engineering -1	5534342	23	
5	Jack Mcfadedn	RDBMS	5534342	78	
6	Jack Mcfadedn	Requirement Engineering	5534342	56	
7	Pink Hewman	Software Engineering -1	5656556	80	
8	Pink Hewman	RDBMS	5656556	60	
9	Pink Hewman	Requirement Engineering	5656556	40	
* (New)					

Customer Name	Product Name	Customer Contact	Contact E-mail	Account Manager	AM Manager
Datum	MacroPod, Softy	Alberts, Amy E.	Amy@datum.com	Polly, Laura Steele	Laura@Fabrikam.com
Adventure Works	Gillow	Hanson, Mark	Mark@AdventureW.com	Sankovic, Barbara	Barbara@Fabrikam.com
Alpine Ski House	MacroPod	Barber, David	David@alpine.com	Kharatishvili, Tengiz	Tengiz@Fabrikam.com
Baldwin Museum of Science	Gillow, Softy	Holt, Holly	Holly@baldwinmofs.com	Wycoff, Pieter	Pieter@Fabrikam.com
Blue Yonder Airlines	MacroPod	Price, Julian	Julian@blueyonder.com	Wycoff, Pieter	Pieter@Fabrikam.com
City Power & Light	Gillow	Brunner, Daniel	Daniel@cpl.com	Polly, Laura Steele	Laura@Fabrikam.com
Coho Vineyard	MacroPod	Karnik, Sachin	Sachin@cohov.com	Trukawka, Adam	adam@Fabrikam.com
Coho Winery	MicroPod	Saddow, Peter	Peter@cohow.com	Speckmann, Melanie	Melanie@Fabrikam.com
Contoso, Ltd	Jetso	Javier, Francisco	Francisco@contoso.com	Rettig, Bjorn	Bjorn@Fabrikam.com
Contoso Pharmaceuticals	Gillow	Dell, Eduard	Eduard@contosoph.com	Stehmann, Victor	Victor@Fabrikam.com
Consolidated Messenger	MicroPod	Lidman, Anna	Anna@consolidatedmsgr.com	Rettig, Bjorn	Bjorn@Fabrikam.com
Fourth Coffee	Gillow, Jetso	Gruber, Eric	Eric@4thcoffee.com	Wycoff, Pieter	Pieter@Fabrikam.com
Graphic Design Institute	Jetso	Oliveira, Manuel	Manuel@gdi.com	Rovik, Dag	dag@Fabrikam.com
Humongous Insurance	MacroPod	Aalling, Lene	Lene@humongousins.com	Paiha, Dominik	Dominik@Fabrikam.com
Litware, Inc.	MicroPod, Jetso	Haddock, Rich	Rich@litware.com	Rettig, Bjorn	Bjorn@Fabrikam.com
Lucerne Publishing	MicroPod, Jetso	Hrebicek, Ondrej	Ondrej@lucernep.com	Wycoff, Pieter	Pieter@Fabrikam.com
Margie's Travel	Softy	Bermejo, Antonio	Antonio@Margiestravel.com	Speckmann, Melanie	Melanie@Fabrikam.com
Northwind Traders	MicroPod	Barreto, Paula	Paula@northwindt.com	Purcell, Sean	Sean@Fabrikam.com
Proseware, Inc.	Gillow	Bott, Jörg	Jorg@proseware.com	Rovik, Dag	dag@Fabrikam.com
School of Fine Art	MacroPod, Jetso	Juhl, Claus	Claus@soff.com	Wycoff, Pieter	Pieter@Fabrikam.com
Southridge Video	Gillow	Axen, Thomas	Thomas@southridge.com	Polly, Laura Steele	Laura@Fabrikam.com
Tailspin Toys	MacroPod	Hill, Christopher	Chris@Tailspintoys.com	Trukawka, Adam	adam@Fabrikam.com
Trey Research	Gillow	Czernek, Pawel	Pawel@treyresearch.com	Speckmann, Melanie	Melanie@Fabrikam.com
The Phone Company	MacroPod	Lee, Oliver	Oliver@thephonecomp.com	Stehmann, Victor	Victor@Fabrikam.com
Wide World Importers	Softy	Fakhouri, Fadi	Fadi@Wwimporters.com	Trukawka, Adam	adam@Fabrikam.com
Wingtip Toys	Softy	McKay, Yvonne	Yvonne@wingtips.com	Sankovic, Barbara	Barbara@Fabrikam.com
Woodgrove Bank	MicroPod	Campbell, David	David@woodgrove.com	Sankovic, Barbara	Barbara@Fabrikam.com

CHAPTER 3

FILTERS AND SORTING

Applying filters and being able to sort the data in a file is extremely helpful. Filters allow you to search out specific criteria, either in a single table, or in multiple tables if they are linked (relationships will be explained later on). Sorting the data is also very useful in organizing the data, such as in alphabetical or numerical order.

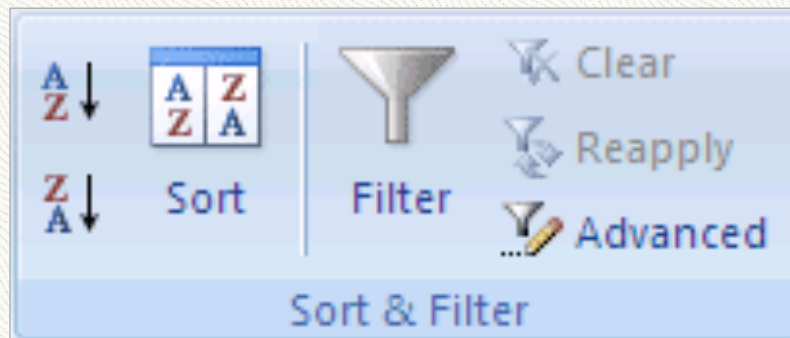


CHAPTER 3



KEY TERMS

- **Filter** - rearranges the data in the table into a form to find specific information in specific records.
- **Sort** - rearranges the data in the table in a specific order so that it is easier to view the information.



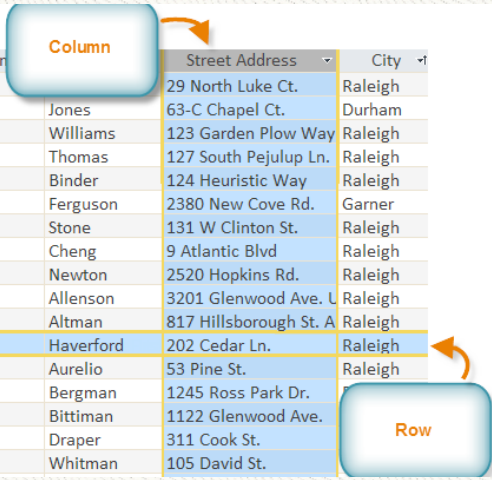
Filters and Sorting

Applying filters are a great and quick way to find out an answer to a specific question that you have or need to find out. The options for filters are by text, numbers, or date. You can search for the records that only have addresses in Winnipeg, or you search for all records except those in Winnipeg. You are also able to filter for multiple information at the same time. You could search for records of customers that live in Winnipeg, and who also have a pet if you are a real estate agent sending out an email about house that are available for purchase.

When sorting, any heading can be sorted. You are also able to sort multiple or all headings in specific order, such as first alphabetical by last name, then first name, then by job position, and then address. You just need to remember that the last sort you apply will rearrange the other sorts you have done. Everything else will remain in the order that you entered it, so sorting is quite effective in keeping the data organized. Access is also very effective with sorting, as it keeps all the information of each record together, rather than other programs that just sort that column of information, which would mix up all the data.

When sorting, you can either go to the arrow beside each headings' name, where you will have the options to sort A-Z, Z-A, or you can go to the Home tab and use the Apply Sorts and Filters button, where you also go to apply filters. This button also includes the option to clear all filters to reset your table back to your original for when you have finished finding out the information you needed. Another preset filter for records is by date.

Gallery 3.1



ID	First Name	Street Address	City
20	Barbara	29 North Luke Ct.	Raleigh
29	Bob	63-C Chapel Ct.	Durham
30	Juanita	123 Garden Plow Way	Raleigh
31	Sara	127 South Pejulup Ln.	Raleigh
32	Larry	124 Heuristic Way	Raleigh
33	Samantha	2380 New Cove Rd.	Garner
34	Jamie	131 W Clinton St.	Raleigh
35	Patti	9 Atlantic Blvd	Raleigh
36	Greg	2520 Hopkins Rd.	Raleigh
37	Carol	3201 Glenwood Ave. U	Raleigh
38	Zoey	817 Hillsborough St. A	Raleigh
39	Danny	202 Cedar Ln.	Raleigh
40	Vig	53 Pine St.	Raleigh
41	Jeffery	1245 Ross Park Dr.	
42	William	1122 Glenwood Ave.	
43	Megan	311 Cook St.	
44	Dick	105 David St.	

Rows will stay together as one record when you sort columns, otherwise your data would get jumbled up

Review Chapters 1-3

Question 1 of 4

What is the purpose of a database?

- ☐ A. To organize information
- ☐ B. To keep track of customers
- ☐ C. To input records
- ☒ D. All of the above

Check Answer